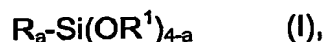


- 17 -

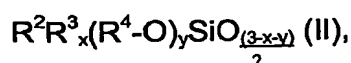
What is claimed is:

1. A formulation comprising (i) at least one organoalkoxysilane and/or at least one organoalkoxysiloxane and (ii) at least one inorganic oxidic powder and (iii), if
 5 desired, an organic or inorganic acid, component (ii) making up from 5 to 50% by weight of formulation, and the formulation having a viscosity of less than 1500 mPa·s.
2. A formulation as claimed in claim 1,
 10 comprising a wetting assistant as further component (iv).
3. A formulation as claimed in claim 1 or 2,
 comprising a diluent or solvent as further component (v).
- 15 4. A formulation as claimed in any one of claims 1 to 3,
 wherein the organoalkoxysilane of component (i) is of the general formula (I)



- 20 in which groups R are identical or different and R is a linear, cyclic, branched or substituted alkyl group having 1 to 18 carbon atoms or an alkenyl group having 2 to 8 carbon atoms or an aryl group or an alkoxy group or an acryloyl- or methacryloyloxyalkyl group or an epoxyalkyl group or a glycidyloxyalkyl group or an aminoalkyl group or a fluoroalkyl group or a
 25 mercaptoalkyl group or a silylated alkylsulfanealkyl group or a thiocyanatoalkyl group or an isocyanatoalkyl group, R¹ is a linear, branched or cyclic alkyl group having 1 to 6 carbon atoms, and a is 1 or 2.

5. A formulation as claimed in any one of claims 1 to 4,
 30 wherein the organoalkoxysiloxane of component (i) is of the general formula (II)



- 18 -

5 in which groups R^2 are identical or different and R^2 is a linear, cyclic, branched or substituted alkyl group having 1 to 18 carbon atoms, an alkenyl group having 2 to 8 carbon atoms, an aryl group, an acryloyl- or methacryloyloxyalkyl group, a glycidyloxyalkyl group, an epoxyalkyl group, a
10 fluoroalkyl group, an aminoalkyl group, a silylated aminoalkyl group, a ureidoalkyl group, a mercaptoalkyl group, a silylated alkylsulfane group, a thiocyanatoalkyl group, an isocyanatoalkyl group or an alkoxy group, R^3 is a linear, cyclic, branched or substituted alkyl group having 1 to 18 carbon
15 atoms, R^4 is a linear, cyclic or branched alkyl group having 1 to 6 carbon atoms, x is 0 or 1 or 2, and y is 0 or 1 or 2, with the proviso that $(x+y) < 3$.

6. A formulation as claimed in any one of claims 1 to 5,
15 comprising a nanoscale powder (ii) having an average particle size (d_{50}) of less than 1200 nm.

7. A formulation as claimed in any one of claims 1 to 6,
20 comprising a powder (ii) from the group consisting of silicon oxides, aluminum oxides, and transition metal oxides.

8. A formulation as claimed in any one of claims 1 to 7,
25 comprising as further components at least one reaction product of components (i) and (ii).

9. A formulation as claimed in any one of claims 1 to 8,
30 characterized by a solids content of up to 90% by weight, based on the formulation, whose respective components total a maximum of 100% by weight.

10. A process for preparing a formulation as claimed in at least one of claims 1 to 9,
35 which comprises
- combining components (i), (ii), and, where appropriate, (iv),

- 19 -

- adding from 0.001 to < 0.8 mol of water per mole of Si in component (i), together where appropriate with a catalytic amount of an organic or inorganic acid in accordance with component (iii), and
- intensely dispersing the mixture.

5

11. A process as claimed in claim 10,
wherein at least one nanoscale inorganic powder (ii) selected from the group consisting of silicas, aluminas, and transition metal oxides is used.

10 12. A process as claimed in claim 10 or 11,

wherein at least one organoalkoxysilane of the general formula (I) selected from the group consisting of methyltriethoxysilane, methyltrimethoxysilane, n-propyltrimethoxysilane, n-propyltriethoxysilane, vinyltriethoxysilane, vinyltrimethoxysilane, 3-methacryloxypropyltrimethoxysilane, 3-glycidyloxypropyltrimethoxysilane, 3-glycidyloxypropyltriethoxysilane, tridecafluoro-1,1,2,2-tetrahydrooctyltrimethoxysilane, tridecafluoro-1,1,2,2-tetrahydrooctyltriethoxysilane, 3-amino-
15 propyltrimethoxysilane, N-(n-butyl)-3-aminopropyltrimethoxysilane, N-(2-aminoethyl)-3-aminopropyltrimethoxysilane, N-(2-aminoethyl)-3-aminopropylmethyltrimethoxysilane, bis(3-trimethoxysilylpropyl)amine or 3-mercapto-
20 propyltrimethoxysilane is used.

13. A process as claimed in at least one of claims 9 to 12,

wherein at least one organoalkoxysiloxane of the general formula (II) or a mixture of organoalkoxysiloxanes of the general formula II or a mixture of at least
25 one organoalkoxysilane of the general formula I and organoalkoxysiloxanes of the general formula II is used.

14. A process as claimed in at least one of claims 9 to 13,

wherein from 0.05 to 0.5 mol of water is used per mole of Si in component (i).

30

15. A process as claimed in at least one of claims 9 to 14,

- 20 -

wherein as acid acetic acid, acrylic acid or maleic acid is used in an amount of from 10 to 3500 ppm by weight, the amount of acid being based on the amount of component (i) used in the formulation.

- 5 16. A process as claimed in at least one of claims 9 to 15,
 wherein the components used are dispersed at a temperature of from 0 to 80 °C.
17. A process as claimed in at least one of claims 9 to 16,
 wherein the components used are dispersed for from 10 to 60 minutes.
- 10 18. A process as claimed in at least one of claims 9 to 17,
 wherein the dispersion or formulation thus obtained is aftertreated for a period of
 from 1 to 8 hours at a temperature of from 30 to 80 °C with stirring.
- 15 19. A process as claimed in at least one of claims 9 to 18,
 wherein the formulation is adjusted to a pH of from 2 to 7 by adding an organic
 or inorganic acid.
20. A formulation as claimed in any of claims 1 to 8, obtainable as claimed in at least
20 one of claims 9 to 19.
21. The use of a formulation as claimed in at least one of claims 1 to 8 and 20 or of
 a formulation prepared as claimed in any one of claims 9 to 19 for scratch
 resistance applications, for abrasion resistance applications, for corrosion
25 protection applications, for easy-to-clean applications, for barrier applications, in
 the electronics segment, for the surface treatment of circuit boards, as an
 insulating layer, as a release layer, for the coating of the surface of solar cells,
 as a glass fiber size, or for homogeneous incorporation of nanoscale powders
 into systems of other kinds.

30

- 21 -

22. The use of a formulation as claimed in at least one of claims 1 to 8 and 20 and 21 or of a formulation prepared as claimed in any one of claims 9 to 19 for producing plastics, adhesives, sealants, resin base materials, inks or paints.

5 23. The use of a formulation as claimed in at least one of claims 1 to 8 and 20 to 22 or of a formulation prepared as claimed in any one of claims 9 to 19 as a constituent of resin based materials, of plastics, of inks, of paints, of adhesives or of sealants.

24. An article obtainable as claimed in claim 21 or 22.

10

25. An article as set forth in claim 23 or as claimed in claim 24.